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0Municipality/Organization: **City of Gloucester**

EPA NPDES Permit Number: **MA041192**

MaDEP Transmittal Number: **W-035854**

Annual Report Number & Reporting Period: **No. 3: May 05-May 06**

NPDES PII Small MS4 General Permit
Annual Report

Part I. General Information

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Certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: 

Printed Name: John Bell

Title: Mayor

Date: 1 June 2006

Part II. Self-Assessment

The City continued it's commitment to its Phase II Storm Water Management Plan in the third year of its NPDES permit. The Engineering Department has developed comprehensive stormwater regulations, expected to go into effect by late summer. The current regulation, which addresses all construction of structures greater than 500 square feet, required the review of nearly 240 building permit applications this past year. The Conservation Commission, Planning Board and Board of Health have placed greater emphasis stormwater management for development, both pre and post construction. With the development of a more comprehensive stormwater regulation, the City will increase its ability plan for future development, while managing its current development.
As noted in previous reports, a strong financial commitment to the plan in years one and two, allowed for substantial mapping of the stormwater network during year three. As we enter into our fourth year of the permit further evaluation of the system is planned. With a newly hired junior civil engineer, the City's GPS and GIS capabilities are expected to grow. The Engineering Department is currently embarking on reconnaissance of every drainage structure in the city. This includes all catch basins, drain manholes, piping network, drain outfalls and observing dry weather flow indicative of possible illicit connections. Records drawings are being field verified and the data being recorded by GPS. This exercise will build an accurate picture of the City's drain network and allow for modeling and future capital project planning. The City's commitment to this work cannot be over stated.

The City continues to encourage hazardous waste collection days and waste oil drop off. The Community Development Department is working on strengthening its language for Conservation Commission filings. A collaborate effort to improve existing stormwater discharge to shellfish beds has resulted in two ongoing restoration/stormwater improvement projects. Again this year, the Engineering Department sent flyers to all of their licensed drainlayers, providing information on required best management practices for construction sites, large and small.

As part of a mandated combined stormwater/ sanitary sewer separation project, the urban city center will be receiving much need improvements to its drainage infrastructure. The collection system for Gloucester is 150 years old in parts of the city. The first phase of the project is expected to break ground in August 2006. The first phase is expected to last 18 months and cost the tax payers of Gloucester nearly $10,000,000. With the improvements to the existing infrastructure and higher degree of stormwater quality from new development, as the City enters into a new permit cycle next year we will be well on our way to improving the quality and quantity of stormwater run off.

With historic rainfalls in May and June 2006, the City's drainage infrastructure was badly damaged in many locations. Failures in historic culverts and drainage ways has lead to the engineering of long-term viable solutions. The City's response to the storms provided opportunities to address problem areas which require more than routine maintenance. The Engineering Department is currently working with FEMA managers, DPW and the local Conservation Commission to make repairs to damaged infrastructure. Many areas were so inundated with stormwater flow, the drainage networks have to be redesigned to accommodate increase urban flow and the potential for more historic rain events.

Part III. Summary of Minimum Control Measures

1. Public Education and Outreach

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – (Reliance on non-municipal partners indicated, if any)	Planned Activities –
	Classroom education on Storm Water	School Committee - Outreach by Engineering/ ConCom	Teachers instruct classes and present material gathered in year one,	During the summer of 05' Engineering met with the Clean City Commission on methods for reaching school aged children.	Involvement with schools will be ramped up for '06-07. A partnership between the Clean City Commission and the Engineering Dept. will provide the materials to the schools.
	Flyer and brochure distribution	Engineering	Supply DPW, City Hall and Public Library with flyers and fact sheets.	Storm water related literature is posted by Engineering, Public Health, Community Development and the public library. The Conservation Agent created flyers as a guide to property owners. These flyers included educational material on vegetated buffers; sedimentation problems, how landscaping activities relate to stormwater and a detailed explanation of the permitting process for residential properties.	To continue with up dated information.
	Hazardous waste management	DPW	Bi-annual hazardous waste collection	A bi-annual, well advertised hazardous waste collection at the Public Works garage.	A bi-annual, well advertised hazardous waste collection at the Public Works garage.

2. Public Involvement and Participation

BMP id#	BMP Description	Person Name	Measurable Goal(s)	Progress on Goal (Reliance on non-municipal partners indicated, if any)	Planned Activities –
	Adopt-A- Stream Program	ConCom/ Community Development	Establish Adopt-a-stream program	A series of non-municipal partners, city departments and volunteers are working to develop an official program. A series of stream cleanups have occurred this spring.	As in previous years, clean ups are generally scheduled during the spring and fall and will continue in 06-07.
	Pond and Stream Cleanup and Monitoring	Community Development. Engineering	Organize stream clean up events	Similar to the Adopt-a- Stream Program, the City of Gloucester has numerous clean up days in 05-06	The activities from the past year will continue into the next year. Potential for greater involvement as the activities are published in the local news paper.
	Stencil Storm Drains	DPW	Stencil 30 storm drains per year Maintain records of stenciled areas in Gloucester	Areas of priority have been established, but lack of funding for stencils and appropriate paint has prevented this from happening during year two.	A non-municipal partner, who had volunteered to take a lead on this, passed away of illness. The City will continue to look into efforts to reestablish this program.
	Storm Water Steering Committee	Engineering	Quarterly meetings and during most TAG meetings.	An ad hoc committee has been established and is currently developing new policies and meeting regularly	Continue the work started in year two.

	Volunteer Monitoring	varies	Establish volunteer groups	There was no further progress on volunteer monitoring during 05-06.	Further develop model to which volunteers can contribute to BMP monitoring.
	Pet Waste Collection	Health Dept. Animal Control	Continued enforcement of ordinances	As we saw the waste bag program go unfunded last year, volunteers began stocking waste bags (plastic shopping bags) in the existing bag receptacles.	The program will be unfunded again this year, but again the pet owners have stepped up efforts to provide waste bags.

3. Illicit Discharge Detection and Elimination

BMP ID #	**BMP Description**	**Responsible Dept./Person Name**	**Measurable Goal(s)**	**Progress on Goal(s) – Permit Year 3** (Reliance on non-municipal partners indicated, if any)	**Planned Activities – Permit Year 4**
	Inspect City Discharges	DPW/ Engineering/ Plumbing Inspector/ ConCom	Locate and inspect all municipal discharges	As in previous years, all city offices associated with discharge to storm systems are actively investigating illicit discharges. Much of the MS4's in the city center have been video inspected and cleaned.	The City in beginning a major drain project in which multiple discharges will be address and eliminated.
	Structure Mapping Development	Engineering	Locate and inspect all municipal catch basins, manholes and discharges	Year 3 saw the collection of data by GPS of the City's stormwater system. Each feature is field verified to assure accurate data collection.	The GPS collection will continue and a GIS model will be developed from this information.

	Septic System Controls	Health Dept.	Continue septic system monitoring inspections Continue noncompliance enforcement activities	The Waste Water Management Plan continues to monitor septic systems in known priority drainage areas. Continue to educate residents about septic system maintenance	Continue monitoring under the WWMP.
	Non-storm water discharge Education	Engineering	Distribute flyers, posters and other materials for non-storm water discharge)	A series of informational posters have been placed where the public and construction professionals can see them	Continue with year 3 activities
	Non-storm water discharge Education	Engineering/ Plumbing Inspector/ ConCom	Enforce penalties for illegal dumping	A draft stormwater regulation is being finalized with education and enforcement penalties	We still anticipate a working regulation by midsummer 2006.

4. Construction Site Storm Water Runoff Control

BMP ID #	**BMP Description**	**Responsible Dept./Person Name**	**Measurable Goal(s)**	**Progress on Goal(s) –** (Reliance on non-municipal partners indicated, if any)	**Planned Activities –**
	Ordinances Review and Update	Steering committee/ Engineering	Develop storm drain connection ordinance.	The draft proposal is at 90% complete and in the final stages of development	Finalize storm water manual.

	Construction Review	Engineering	Weekly reviews of construction activities	Not only are construction sites reviewed, but also Engineering reviews over 200 individual building sites..	Continue the review of all ongoing and anticipated construction sites.
	Construction site storm water runoff control	Engineering	Develop/ Implement standard construction details and policies	Provide all contractors with educational and regulatory information to assists them in better management practices	Continue the outreach to contractors.

5. Post-Construction Storm Water Management in New Development and Redevelopment

BMP ID #	**BMP Description**	**Responsible Dept./Person Name**	**Measurable Goal(s)**	**Progress on Goal(s) –** (Reliance on non-municipal partners indicated, if any)	**Planned Activities –**
	BMP Inspection and Maintenance	Planning Dept./ ConCom/ Health Dept/ DPW	Inspect all city BMPs once per year	Many of the municipal BMPs are in need of repair and the process of maintenance and or replacement is on going.	Lack of funding and manpower has limited the DPWs ability to make all the corrective measures to all municipal BMPs.
	BMP Inspection and Maintenance	DPW/ Engineering/ Plumbing Inspector/ ConCom	Implement changes to BMPs based on inspection results	Similar to the above goal, as the BMPs are inspected, all necessary actions will be taken to implement change	Follow up the inspection with the necessary action

	Ordinance for Post Construction Runoff	Engineering	Develop storm drain connection regulations	Engineering has been successful in controlling the connections to storm drains. Only allowed in certain situations and in controlled environments	This will continue to evolve in the following years

6. Pollution Prevention and Good Housekeeping in Municipal Operations

BMP ID #	**BMP Description**	**Responsible Dept./Person Name**	**Measurable Goal(s)**	**Progress on Goal(s) –** (Reliance on non-municipal partners indicated, if any)	**Planned Activities –**
	Catch Basin Cleaning Program	DPW	Develop catch basin cleaning program Collect data	The basins were cleaned on an as-need basis in 05-06.	Protocol for catchbasin cleaning will remain the same in 06-07. The Engineering Department has developed a tracking method for DPW labor to record valuable information while cleaning basins. This data will be collected in imported into a City-wide GIS.
	Street Cleaning	DPW	Sweep streets once per year	Both municipal sweepers are down with mechanical problems. The City hired an outside vendor to supply sweeping services.	Purchase of new sweepers or continued outsourcing of sweeping is currently in discussion. The Director of Public Works is currently developing a new sweeping program that will allow for advanced tracking of sweeping activities.

	Pipe Cleaning	DPW/ Engineering	Clean drainage systems	Much of the city center has been cleaned of debris and sand build up.	Identify areas needed for cleaning.
	New Pipe and Structure Installation	DPW/ Engineering	Replace 475 feet of drainage pipe per year Replace 10 catch basins each year	Similar to the previous years, budget restraints have prevented the improvement of drains to the extent anticipated under the management plan.	No new progress has occurred due to funding and reduced work force.
	Investigate Municipal BMP's	DPW/ Engineering	Inspect three structural BMPs per year	All BMP's are under investigation for integrity and functionality.	No new progress has occurred due to funding and reduced work force